



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,827	03/04/2004	Patrick Arachequesne	P24953	3641
26360	7590	03/31/2010	EXAMINER	
RENNER KENNER GREIVE BOBAK TAYLOR & WEBER FIRST NATIONAL TOWER FOURTH FLOOR 106 S. MAIN STREET AKRON, OH 44308			CLEMENT, MICHELLE RENEE	
		ART UNIT	PAPER NUMBER	
		3641		
		MAIL DATE		DELIVERY MODE
		03/31/2010		PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PATRICK ARACHEQUESNE

Appeal 2009-010885
Application 10/791,827
Technology Center 3600

Decided: March 31, 2010

Before WILLIAM F. PATE, III, MICHAEL W. O'NEILL, and
STEFAN STAICOVICI, *Administrative Patent Judges*.

O'NEILL, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Patrick Arachequesne (Appellant) seeks our review under 35 U.S.C. § 134 of the final rejection of claims 49-56 and 58-60. Appellant canceled claims 1-48 and 57. We have jurisdiction under 35 U.S.C. § 6(b).

The Invention

The claimed invention is to a holographic sight device mounted on a firearm.

Claim 60, reproduced below, is representative of the subject matter on appeal.

60. A firearm comprising at least one barrel having a muzzle end and an opposite end and a holographic sight device mounted on said firearm, said holographic sight device being mounted closer to said muzzle end than to said opposite end.

The Prior Art

The Examiner relies upon the following as evidence of unpatentability:

Sanders	US 5,046,277	Sep. 10 1991
Tai (hereinafter "Tai '362")	US 5,483,362	Jan. 9, 1996
Tai (hereinafter "Tai '060")	US 6,490,060 B1	Dec. 3, 2002
Booth	US 6,671,990 B1	Jan. 6, 2004

Bushnell HOLOsight N battery Holographic Standard Reticle Laser Handgun Sight 510021, <http://www.opticsplanet.net/bushnell-holosight.html> (hereinafter "Bushnell").

UltiMAK, <http://ultimak.com/UnderstandingE-sights.htm> (hereinafter "UltiMAK").

HOLOgraphic Weapon Sight Product Introduction, NDIA/EOTech presentation (June 2004) (hereinafter "HOLOgraphic").

EOTech Electro-Options Technologies at TREXPO East, <http://www.defensereview.com/article/106.htm> (hereinafter "EOTech").

Roxana Tiron, *Holographic Weapon Sights Grip the U.S. Military Market*, NATIONAL DEFENSE MAGAZINE, Sept. 2004, <http://www.nationaldefensemagazine.org/issues/2004/Sep/Holographic.htm> (hereinafter "National").

The Rejections

The following Examiner's rejections are before us for review:

Claims 60 and 56 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Booth and Tai '362.¹

Claims 49-55, 58, and 59 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Booth, Tai '362, Sanders, and Tai '060.

Appellant's contentions against the grounds of rejection are set forth in the Appeal Brief on pages 3-7 and the Reply Brief on pages 4-5. The Examiner's rejections and the response to Appellant's contentions are set forth in the Answer on pages 4-13.

SUMMARY OF DECISION

We AFFIRM.

OPINION

Issues

Did the Examiner err in concluding the claimed subject matter on appeal is unpatentable for want of nonobviousness?

Pertinent Facts

Booth discloses modifying a rifle 40' with an extension rail 71 in order to attach various accessories such as sights and scopes. Col. 3, l. 55 to col. 4, l. 4; figs. 6 and 7.

¹ The Examiner relies additionally on Bushnell, UltiMAK, HOLOgraphic, EOTech, and National for the proposition that holographic sights are known for having unlimited field of view and unlimited eye relief.

Tai '362 discloses a holographic sight mounted on top of a handgun.
Fig. 1.

Sanders discloses that element 162 mounts on a firearm barrel (not numbered). Fig. 1.

Tai '060 discloses mounting a holographic sight on to a firearm using a WEAVER style dovetail rail. Fig. 16.

Bushnell (pages 1 and 2, *see* illustrations) and HOLOgraphic (p. 24) depict mounting a holographic sight proximate the chamber of a firearm.

UltiMAK teaches mounting the holographic sight forward of the receiver of a firearm in order to eliminate the blind spot caused by having an optical sight closer to the aiming eye. Pages 8-9.

Principles of Law

The Supreme Court in *KSR Int'l. Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007) held that rigid preventative rules that deny factfinders recourse to common sense are neither necessary nor consistent with the Court's case law. The Court noted that its precedents made clear the analysis to combine known elements in the fashion claimed "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *Id.* at 418.

What a reference teaches a person of ordinary skill is not limited to what a reference specifically "talks about" or what is specifically "mentioned" or "written" in the reference. *Syntex (U.S.A.) LLC v. Apotex, Inc.*, 407 F.3d 1371, 1380 (Fed. Cir. 2005). "A person of ordinary skill is also a person of ordinary creativity, not an automaton." *KSR*, 550 U.S. at 421.

Analysis

Claims 56 and 60

We find that the prior art of record illustrates that the farthest point from the opposite end of a firearm at which a holographic sight device would be mounted on the firearm would be at a point of the chamber. The major question becomes whether this point is closer to the muzzle end than to the opposite end.

Firearms come in a variety of shapes and sizes. The evidence of record demonstrates this finding. With handguns the chamber is proximate the pistol grip; in the parlance of the claimed invention, the “opposite end.” In such a case, we find that the prior art of record would demonstrate the holographic sight is mounted closer to the opposite end than the muzzle end.

Long guns, such as rifles and shotguns, do not permit such a clear conclusion that the prior art of record would demonstrate that the holographic sight is mounted closer to the opposite end than the muzzle end. This is based upon the finding that the prior art of record illustrates the holographic sight is mounted on the chamber or slightly forward of the chamber. This is because the distances between the chamber and the butt of the rifle or shotgun (opposite end, Appellant’s nomenclature), and between the chamber and the muzzle of the rifle, vary depending upon the particulars of the rifle or shotgun. For instance, for a hunting rifle, the barrel is long. As such, the distance between the chamber and the muzzle is long compared to the distance between the chamber and the butt. In such a case, the holographic sight would be mounted closer to the opposite end (the butt) than the muzzle end. The same can be said for a hunting or sporting shotgun. In both instances these long guns are used to hit target at a

distance, and as such, require a long barrel to direct the projectile to the target.

However, in a submachine gun such as a Heckler and Koch MP5, Erfurter Maschinenfabik MP40, Israel Military Industries UZI, or FN Herstal P90, or a tactical shotgun such as the Remington 1100 or 870, Winchester M97, or Mossberg 500 series, the barrel is relatively short. These firearms are designed to be used in close quarters combat. To have a long barrel would inhibit the functionality of the firearm because the operator could not get into position to properly confront the target. As such, when the shooter utilizes a full length stock, the distance between the chamber and the butt is longer than the distance between the chamber and the muzzle. In this case, when a holographic sight is mounted proximate the chamber the holographic sight is mounted closer to the muzzle end than the opposite end.

In view of these foregoing reasons, the Examiner's articulation of the ground of rejection for claim 60 is sustained. Appellant's argument focuses on the express writings within the prior art references. For instance, Appellant argues that Booth fails to disclose mounting a holographic sight device near the muzzle end. We agree. If Booth did disclose such, the rejection would be under anticipation rather than obviousness. The Examiner utilized Booth to demonstrate the capability of mounting a sighting device closer to the muzzle end because of the rail extension, utilized the other prior art of record to teach that the holographic sight can be mounted at a distance from the shooter's eye, and answered Appellant that it is the combination of references that are relied upon for the current

rejections. As such we are unconvinced by Appellant's arguments that the Examiner erred in concluding claim 60 wants of nonobviousness.

Claim 56 further defines the mounting of the holographic sight at the muzzle end.

Our reviewing court has stated that “[t]he fact that the motivating benefit comes at the expense of another benefit, however, should not nullify its use as a basis to modify the disclosure of one reference with the teachings of another. Instead, the benefits, both lost and gained, should be weighed against one another.” *Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340, 1349, n. 8 (Fed. Cir. 2000). In other words, “[t]rade-offs often concern what is feasible, not what is, on balance, desirable.” *Id.*

Here, placing the holographic sight at the muzzle results in a trade-off between acquisition of the target and maneuverability to the target. While placing a holographic sight at the muzzle would add weight, moving the holographic sight closer to the muzzle permits a faster target acquisition because “true 2 eye open” shooting and maintaining of peripheral vision to permit multiple target acquisition is achieved.

Placing the holographic sight at the muzzle of a sporting or hunting rifle or shotgun is not only feasible, but also desirable, because both are utilized to shoot at distance targets and target acquisition is more desirable than maneuverability. Since the record evidences that having the holographic sight closer to the muzzle permits faster target acquisition, a person having ordinary skill in the art would consider placing the holographic sight at the muzzle to achieve this more desirable result of target acquisition, even though there would be a partial hindrance of maneuverability to the target.

In view of the foregoing reasons, after weighing the benefits and losses of mounting a holographic sight at the muzzle, we conclude it would be feasible for a person having ordinary skill in the art to mount the holographic sight at the muzzle. As such, mounting a holographic sight at the muzzle of a firearm would be obvious to a person of ordinary skill in the art. Accordingly, the Examiner did not err in concluding claim 56 wants of nonobviousness.

Claims 49-55, 58, and 59

For this ground of rejection, Appellant only separately argues claims 49 and 54. As such, we select claim 49 to represent claims 50-53, 55, 58, and 59. 37 C.F.R. § 41.37(c)(1)(vii).

The Supreme Court stated that based on its precedent, when a claimed combination is simply an arrangement of old elements with each performing the same function as it had been known to perform and yields no more than a person of ordinary skill in the art would expect from such an arrangement, the claimed combination is obvious. *KSR*, 550 U.S. at 417, *citing Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 282 (1976). The Court elaborated that common sense teaches that “familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.” *KSR*, 550 U.S. at 420.

For claim 49, Appellant’s argument is unconvincing because it focuses only on Sanders, whereas the Examiner’s rejection is based on Booth, Tai ‘362, Sanders, and Tai ‘060. Also, Appellant’s argument is not commensurate in scope with the claim. The claim only requires the groove to be formed on the firearm and no parallelism is claimed. This groove

formation could be anywhere on the firearm, not just on the barrel as the Appellant argues and as the Specification discloses as a preferred embodiment, and the groove formation could run at a slight angle and satisfy the claim limitations set forth in claim 49, *viz.* extend along a groove direction and receive a force along a longitudinal direction. Regarding Appellant's focus on Sanders, nonobviousness cannot be established by attacking the references individually when the rejection is predicated upon a combination of prior art disclosures. *See In re Merck & Co., Inc.*, 800 F.2d 1091, 1097, (Fed. Cir. 1986).

In our view, this is a case where the claim is to a combination of known elements arranged in a new manner yet performing the same functions as before, and appears to yield no more than a person of ordinary skill in the art would expect from such an arrangement. When such an arrangement is presented, it is obvious, unless something unpredictable occurs. Appellant has not articulated or provided evidence that anything unpredictable occurs, and the Specification does not disclose unpredictable results. As such, this combination appears to be a product not of innovation but of ordinary skill and common sense and, in our view, a person of ordinary skill in the art would be able to fit the teachings of Booth, Tai '060, Sanders, and Tai '362 together like pieces of a puzzle to reach the combined features set forth in claim 49.

Concerning claim 54, Appellant argues that Sanders' element 162 is not a rib and Tai '060 fails to teach a firearm having a groove and a sight device with an attached strip that is received in the groove.

The Examiner finds that in applying the broadest reasonable interpretation to the term "rib," Sanders' sight ramp satisfies the claimed rib

feature. Appellant's Specification fails to provide a lexicographic definition of the term "rib." In the absence of an express definition of a claim term in the Specification or a clear disclaimer of scope, the claim term is interpreted as broadly as the ordinary usage of the term by one of ordinary skill in the art would permit. *In re ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007); *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). Moreover, properties of preferred embodiments described in the specification which are not recited in a claim do not limit the reasonable scope of the claim. *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369 (Fed. Cir. 2003).

Appellant's claim construction imports what is shown in the figure as reference numeral 3 which unduly limits the claimed feature to a rib on an over and under shotgun. Claim 54 is not limited to over and under shotgun arrangements. Claim 54 is limited to a firearm barrel having a longitudinal rib.

Comparing the Examiner's interpretation to the Appellant's interpretation of "rib," the Examiner's interpretation appears to be more appropriate because it does not limit the claim language to a particular embodiment disclosed in the Specification as compared to the Appellant's interpretation.

The Examiner found element 162 in Sanders satisfies the claimed rib. Element 162, as shown in figure 1, runs in a longitudinal direction of a barrel (not numbered). As such, Sanders discloses a barrel with element 162 running along the longitudinal direction of the barrel. Thus, this disclosure satisfies the claimed feature of the barrel having a longitudinal rib.

Appellant's latter arguments concerning Tai '060 are unconvincing. First, the argument it is not commensurate with the claim scope. The claim does not recite a sight device with an attached strip that is received in the groove. Instead, the claim recites the mounting means is structured so that an end part of the intermediary plate comes flush with the rib and the sight device is fixated to "said end part." Second, Appellant's argument just alleges what is disclosed in Tai '060 and fails to distinguish how this disclosure is different from what is claimed within claim 54.

In view of the foregoing, the Examiner's rejections of claims 49 and 54 are affirmed. Claims 50-53, 55, 58, and 59 fall with claim 49.

CONCLUSION

The Examiner did not err in concluding the claimed subject matter is unpatentable for want of nonobviousness.

DECISION

The Examiner's decision to reject claims 49-56 and 58-60 for want of nonobviousness is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

Appeal 2009-010885
Application 10/791,827

mls

RENNER KENNER GREIVE BOBAK TAYLOR & WEBER
FIRST NATIONAL TOWER FOURTH FLOOR
106 S. MAIN STREET
AKRON, OH 44308